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ABSTRACT

Replicating the methodology used by Block, Block, and Gjerde (1986), a prospective, longitudinal examination was made of relations between divorce and children's adjustment. Data from the New York Longitudinal Study (NYLS), originally collected by Thomas, Chess, and Birch (1963, 1968, 1977, 1983, 1984) was analyzed. The NYLS assessed children's personalities at home and school from infancy to young adulthood. Many expected results were not found. Regarding the prospective analyses, girls, rather than boys, showed more problematic behavior prior to parental separation. The effects of time also were not in accord with prior findings, as children's adjustment generally was not a function of the time since parental separation. With the exception of parental conflict, few child care practices were consistent predictors of children's long-term adjustment. The interaction between temperament and parental conflict was not strong in predicting children's short- and long-term adjustment. Results highlight the predictive utility of parental conflict, suggest discrepancies with prior research, and demonstrate the value of the secondary analysis technique. (Author/RH)

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THE EFFECTS OF DIVORCE AND PARENTAL CONFLICT ON CHILDREN'S ADJUSTMENT: A PROSPECTIVE STUDY

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The Effects of Divorce and Parental Conflict on Children's Adjustment: A Prospective Study

Abstract

The present study involved a prospective longitudinal examination of relations between divorce and children's adjustment, replicating the methodology utilized by Block, Block, & Gjerde (1986). Using data from the New York Longitudinal Study (NYLS) originally collected by Thomas, Chess, and Birch (1963, 1968, 1977, 1983, 1984), personalities of children were assessed at home and when age-appropriate, in school from infancy to young adulthood. Many of the expected results based on prior research were not found. Regarding the prospective analyses, girls, rather than boys, showed more problematic behavior prior to the parental separation. The effects of time also were not in accord with prior findings, as children's adjustment generally was not a function of the time since the parental separation. With the exception of parental conflict, few childcare practices were consistent predictors of children's long-term adjustment. Finally, the interaction between temperament and parental conflict was not strong in predicting children's short- and long-term adjustment. Results highlight the predictive utility of parental conflict, suggest discrepancies with prior research, and demonstrate the value of the secondary analysis technique.

The Effects of Divorce and Parental Conflict on Children's Adjustment: A Prospective Study

Within the last two decades, the divorce rate in the United States has increased substantially. Since 1958, when there were 2.1 divorces per 1,000 population, a gradual increase in the number of divorces has occurred, reaching 2.5 per 1,000 individuals in 1965 and peaking at 5.3 per 1,000 population in 1979 and 1981 (Glick & Lin, 1986). Although a gradual decline in the divorce rate has taken place in the 1980's (4.9 per 1,000 in April, 1981 and 5.0 per 1,000 in March, 1985), a combination of counterbalancing forces makes the probability of dramatic changes in the divorce rate unlikely. Population growth, increases in the employment and status of women, and a high rate of cohabitation outside of marriage are all factors related to higher divorce rates. However, the rising age at which people marry, the scarcity of eligible women (due to the lower birth rate after the baby boom), and fears about the effects of divorce on children may mitigate any major increase in divorce (Glick, in press). Based on the dramatic increase of divorces over the last two decades and the prospects that a similarly high number of families will continue to be affected by divorce in the future, it remains imperative to understand the effects of parental separation on children's adjustment.

As research on divorce and children's adaptation has accumulated, there has been a gradual shift in emphasis from family structure to family process (Emery, Hetherington, & DiLalla, 1984; Emery, 1988). Investigations focused on comparing children from "father-absent" and "father-present" families have been replaced by more sophisticated studies that examine family process not just family structure. That is, events that accompany marital dissolution, rather than the event of divorce per se have been identified as potentially more salient correlates of children's adjustment (Berg & Kelly, 1979; Emery, 1982, 1988; Hess & Camara, 1979; Santrock & Warshak, 1981). Longitudinal investigations of divorced families (Hetherington, Cox, & Cox, 1978,

1982; Wallerstein & Kelly, 1980, 1983) have provided particularly strong support for this focus on family process.

Although the use of longitudinal designs has been a significant improvement over cross-sectional methodology, longitudinal studies have not been prospective as they have begun after the initial parental separation. Changes in family process that may have begun before the divorce, not to mention changes in children's behavior, therefore may be erroneously attributed to the parental separation. These problems, together with the fact that retrospective reports involve a number of biasing errors, highlight the need for longitudinal research in which divorce is studied prospectively.

To our knowledge, no study has been undertaken with the explicit intent of providing a prospective view of children and divorce. Given the high rate of divorce, however, it is possible to use studies of normal child development as prospective investigations of the consequences of divorce for children. In the most complete attempt to do so to date, Block, Block, & Gjerde (1986) reanalyzed data from their longitudinal study of normal development. They found that, as many as 11 years prior to their parents' divorce, children from eventually separating families showed more behavior problems than children from always married families. Analyses for sex differences revealed earlier and more consistent differences for boys than girls. Boys whose parents would later separate demonstrated a pattern of problematic behaviors at ages 3, 4 and 7, including a lack of impulse control, stubbornness, and restlessness. Girls from eventually separating families only had increased behavior problems at age 4 when compared to their peers who would remain in intact homes. These data are impressive in that they closely parallel findings of post-divorce research. However, it should be noted that no pre- or post-divorce differences were found for late school age and adolescent children in another prospective study, the National Survey of Youth (Furstenberg & Allison, 1985).

The New York Longitudinal Study

Given the importance of a prospective investigation of children and divorce, we have undertaken a reanalysis of the New York Longitudinal Study (NYLS). Conducted by Thomas, Chess, and Birch (1963, 1968, 1977, 1984), the NYLS originally was intended to explore the interaction between child temperament, parental influences, and later child outcome. However, due to the number of marriages that were disrupted during the course of the three decades of data collection, the study can serve as a prospective investigation of children's adaptation to divorce. The investigators have been criticized for their lack of methodological rigor (e.g., psychometric properties of some instruments, control for family size, birth order) and the unusual sample characteristics of their subjects (Robins, 1979). Still, the importance of the subject matter and the availability of prospective data make a secondary analysis worthwhile, albeit with an awareness of these shortcomings.

In fact, Chess, Thomas, Korn, Mittleman, and Cohen (1983) used the NYLS to examine the long-term effects of marital status and parental conflict on young adult (age 18-22) functioning. Although divorce predicted adult adaptation, its effects were accounted for by parental conflict in a multiple regression analysis.

The present analysis is intended to extend the findings of the Chess et al. (1983) by examining children's functioning at <u>each</u> age at which children were assessed (ages 1-5, 6, 9, 16-17, 18-22). In addition, a prospective analysis of children's adjustment prior to divorce was conducted in a manner following Block et al. (1986). The NYLS also allows for two other important questions to be addressed. The first concerns the effects of the passage of time on children's adjustment following a divorce. Past investigators have found functioning to improve with time, especially after a two-year period following the parental separation (Hetherington, 1981; Kurdek, 1981; Wallerstein & Kelly, 1983). The second question concerns the interaction between divorce and child temperament in predicting later child adjustment. It has been suggested that temperamentally more difficult children would be at a greater risk during times of family duress (Rutter, 1979).

Method

Subjects

The NYLS sample came from primarily middle to upper-middle class backgrounds. Parents were well-educated, as 40% of mothers and 60% of fathers had post-graduate college degrees, and less than 10% of the sample had no college education. Families were predominantly Jewish (78%), with the remainder Catholic (7%) or Protestant (15%). After the first wave of data was collected, the sample comprised 133 subjects (66 males, 67 females) from 84 families. Forty-five families had only one child participating in the project, 31 families had two, 6 families had three, and 2 families had four children involved in the study. During the remaining three decades of data collection, only one subject dropped out.

At the time of birth of the first child, one-half of the mothers were less than 31 years old, while father's median age was 33.6 years. Parents had been married from one to nineteen years, with a median of five years. Of the 132 subjects followed into adulthood, 35 subjects (25 families) experienced a permanent parental separation. Twenty-two (63%) of these subjects were male, 13 (37%) were female. Child's age at time of separation occurred when ten children were between 0 and 5 years of age, none between 6 and 8, ten between 9 and 13, eleven between 14 and 19, and four between ages 20 and 22.

Procedure

The NYLS was begun in 1956 under the direction of Alexander Thomas and Alexander Chess. Sample recruitment was completed six years later for what the investigators describe as the Core Sample, comprised of 133 white, middle class subjects. Families with appropriate-age infants were recruited from a variety of sources,

including friends and acquaintances of the study's principal investigators, patients from a pediatrician's practice, and friends of both groups. Families initially were contacted when infants were in the first few months of life and followed until they were age 22, with additional home assessments at ages 3, 5, and 16-17. At school, teachers evaluated children's adjustment at age 5, and standardized achievement test scores were collected throughout elementary school. Information on child temperament also was gathered annually beginning in the child's first year and continuing until age 5. Detailed information about the procedures used in the NYLS can be found elsewhere (Chess & Thomas, 1984; Thomas & Chess, 1977; Thomas et al., 1963, 1968).

Measures

Temperament. Information on child's temperament during the child's first three years was obtained primarily through parental reports. Parents were interviewed at three month intervals during the first eighteen months of life, then at six month intervals until 5 years of age. Interviews were focused on eliciting detailed factual descriptions of everyday life situations occurring in the preceding time period (Thomas, Chess, & Birch, 1968). Mothers were used as raters of temperament after pilot data indicated significant associations between trained observers and mothers reports at the .01 level of significance (for more information on the development of the temperament scales, see Thomas et al., 1963, 1968). Categories included activity level, rhythmicity, approach-withdraw, adaptability, intensity, sensory threshold, quality of mood, distractibility, and persistence. Items were scored on a 3-point scale annually based on data collected in the preceding year. A cumulative score, based on the sum of the nine categories was used. Using this system, the maximum score would be 27, with the minimum being 9. Contrary to what might be expected based on theories of temperament, even the parents' ratings were rather unstable over the first five years. The highest correlation obtained in 9 X 10 matrix was .54 for ratings of adaptability at 3 years of age and 4 years of age. Sixty-three

per cent of correlations were not even statistically significant.

Parent Interview- Childcare Practices and Attitudes. When children reached age 3, a structured interview to elicit information pertaining to childcare practices and attitudes was administered to both parents individually. Content areas included the degree of parental conflict and tension, the amount of warmth, protectiveness, and permissiveness shown to the child, and the types of discipline employed (Cameron, 1977). Immediately following the interview, the interviewer rated the parents on 99 items related to demographic information and parental attitudes and childcare practices. From the 99 items, Cameron (1977) selected 70 as meeting basic statistical criteria for use in correlational analyses. Only the ratings of mothers were used in this analysis since their was greater than 95% agreement between parent's ratings. A cluster analysis was then performed, using the Tryon system, resulting in 8 oblique factors. These included parental attitudes/practices concerning conflict, rejection, economic stress, concern, inconsistent discipline, and limitsetting.

Three and Five Year Home Adjustment Scale. These measures were developed to assess diverse realms of child behavior at home (Chess, Thomas, & Birch, 1963). Parents rated children on 11 areas of functioning using a 5-point scale. Included were such areas as sleep, eating, discipline, and fears. Global adjustment scores were calculated by summing the rating for each category and dividing by the number of categories. For the 3-year scale, interrater reliabilities were variable, with 7 of the 11 scales .80 or above, and the other 4 categories falling between .32 and .75 (Chess & Thomas, 1984). For the 5-year parent interview, interrater reliabilities were substantially improved, all being above .88.

Five Year School Behavioral Adjustment Scale. The items for this measure were taken from the 5 year-old home adjustment scale. Appropriate modifications in wording so they would be applicable for teachers to complete at the school setting. Categories that were nonapplicable to a classroom situation, such as sleep, eating, and elimination, were omitted from the inventory, while several items pertaining to school behavior were added. Interrater reliabilities for all categories were above .88 (Chess & Thomas, 1984).

Intellectual Development (IQ) Test Scores. Intellectual data were obtained at ages 3, 6, and 9 through individual administration of standardized intelligence scales. At ages 3 and 6, the Stanford-Binet Form L was used (Terman & Merrill, 1937). At age 9, 50 of the subjects were administered the Wechsler Intelligence Scale for Children (WISC).

Adolescent Adjustment. When the subjects were 16-17 years old, they were administered a semi-structured interview about present functioning. Identical interviews also were presented to parents about child adjustment. Specific areas of functioning and global adaptation were assessed by combining responses from both sources. Independent raters scored subjects on a 7-point scale, ranging from excellent to poor. A global adaptation score, based on a 9-point scale, also was calculated from the interview data (for more information on this instrument, see Chess & Thomas, 1984).

Early Adult Adjustment. When subjects were between ages 18 and 22, they were interviewed again, and the same interview was administered to a sub-sample of parents (N = 40). Format and content of the interview was similar to the adolescent interview, with some questions rephrased to match the subjects change in developmental status (Chess et. al., 1983). Raters evaluated interviews for specific areas of functioning on a 7-point scale ranging from excellent to poor. As in the adolescent interview, a global adaptation score, based on a 9-point scale, also was obtained from the interview data. Interrater reliabilities for the global adaptation scores were generally high, ranging from .82 to .87. For the present analysis, subject and parent global adaptation scores of subject's adjustment are presented separately.

Results

Analysis of the data was carried out in four stages: (1) divorce was examined prospectively by comparing eventually separating and always intact families; (2) the effects of time since divorce were studied by

comparing recently divorced children with married and long-divorced children; (3) parental childcare practices/attitudes at age 3 were correlated with indices of children's short- and long-term adjustment; (4) the interaction of temperament at ages 1-5 and current marital status was used to predict children's long-term adaptation. However, post-divorce comparisons between intact and divorced families precede these four analyses. Post-divorce comparisons serve as a reference point for interpreting the prospective results.

In Table 1 point biserial correlations between marital status and child outcome are presented. In these analyses, children were placed in either the married or the separated group, based on their parents' marital status at the time the particular outcome measure was completed. Thus, the complete sample of children tested is included at each data point. Data indicate that boys from divorced families displayed poorer adolescent and young adult adaptation than boys from intact families, as rated by both subjects and parents. Although the sample size for girls was particularly small for post-divorce relations, girls from divorced families showed greater behavioral difficulty at home at age 5 compared to girls from intact homes. In marked contrast to boys, however, parents rated girls from divorced families as <u>better</u> adjusted than young adult females from married homes. Other analyses were not performed due to the small number of girls who experienced a divorce before age 5.

Insert Table 1 about here

<u>Part I: Prospective Relations Between Intact and Divorced Families</u>. The failure to find many post-divorce differences obviously limits the magnitude of pre-divorce effects that one would expect to find in this data set (as with Furstenberg & Allison, 1985). Nevertheless, children's adjustment between always-married and to-be-divorced families was examined prospectively. Following Block et al., 1986, point biserial correlations were calculated between marital status (1 = intact, 2 = divorced) and child outcome for all data points. In

order to conduct a completely prospective analysis, all subjects whose parents had already divorced were omitted from the sample, as evidenced by the shrinking sample size when children are older.

Prospective relations between marital status and child outcome are presented separately for boys and girls in Table 2. Point-biserial rs significant beyond the $p<.10$ level are noted in asterisk because of the constraints set by differences in the relative sizes of the intact and divorced groups. Block et al. (1986) used this same criterion in recognition that group and the various dependent measures have very different variances, i.e., the range of possible correlation values is less than 1.00.

Results for boys indicate few significant prospective relations. However, marital status at age 3 was associated with difficult child temperament at age 3, with boys from eventually divorcing families showing more difficult temperament. In general, early relations between marital status and child adjustment were stronger for girls than boys. At ages 2, 4, and 5 significant associations between marital status and child temperament were evident, with girls from eventually divorcing families reported to be more difficult temperamentally at all of these ages. Point-biserial correlations could not be calculated to compare intact and divorced groups at ages beyond 15 because of the limited sample of subjects whose parents separated following their sixteenth birthday.

Insert Table 2 about here

Part II: Proximity of Divorce and Children's Adjustment. Based on prior findings, it was expected that children would be affected more adversely by their parents' divorce within a two-year period preceding or following the parental separation. Planned contrasts were carried out to examine group differences between

children from always-married families- Group 1, children of parents who had separated outside a two-year band preceding or following the divorce- Group 2, and children from families where the divorce was within a two-year band- Group 3. In general, few group differences were evident between either group of children from divorced families and children from always-married families, nor between children from the two divorced groups. However, in support of the hypothesis, adolescents from always-married families showed more positive adjustment than adolescents from recently separated families on the adolescent adaptation interview (Group 1 - $x=5.7$, s.d.$=1.7$; Group 3 - $x=4.6$, s.d.$=1.1$, $t=-1.71$, $p<.05$). There also was a trend for adolescents from less-recently divorced families to report a more positive adjustment than peers from more-recently divorced families (Group 2 - $x=5.5$, s.d.$=1.5$; Group 3 - $x=4.6$, s.d.$=1.1$, $t=1.32$, $p<.10$).

Because of the small number of girls from divorced families, similar contrasts could not be carried out for both sexes individually; however, results of planned comparisons for boys were possible for most age groups. Relations are similar for those found for the entire group. Few of the findings were significant in any direction, much less in the support of the proximity hypothesis. However, at age 3, boys from more-recently divorced families were found to be significantly more difficult temperamentally than boys from less-recently divorced families (Group 2 - $x=1.51$, s.d.$=.61$; Group 3 - $x=2.21$, s.d.$=.50$, $t=2.50$, $p<.05$), while boys from more-recently divorced families also showed lower adaptation scores than peers from intact families in adolescence (Group 1 - $x=5.6$, s.d.$=1.7$; Group 3 - $x=4.3$, s.d.$=1.0$, $t=-2.46$, $p<.05$). Finally, there was a trend for young adults from more-recently divorced families to report less positive adaptation than young adults from intact families (Group 1 - $x=5.9$, s.d.$=1.6$; Group 3 - $x=3.5$, s.d.$=0.7$, $t=-4.36$, $p<.10$).

Part III: Childcare Practices and Attitudes and Child Outcome. Among univariate correlations between childcare practices/attitudes and child outcome variables, parental conflict was the most consistent predictor of child adjustment, as previously reported by Chess et al. (1983),. When all children were considered together,

conflict was related to concurrent child behavior problems at age 3 ($r=.29$, $n=106$, $p<.01$), and difficult child temperament at age 4 ($r=.19$, $n=86$, $p<.10$). However, relations were at least as strong between parental conflict and poor adaptation in adolescence and young adulthood ($r=-.30$, $n=98$, $p<.01$ in adolescence and $r=-.41$, $n=103$, $p<.001$ in young adulthood [Chess et. al., 1983]).

Other childcare practices were not as strongly related to child outcome, particularly later in time. An exception to this trend was maternal rejection, as it was related to child behavior difficulty at ages 3 and 5 ($r=.22$, $n=106$ at age 3; $r=.17$, $n=103$ at age 5, $p<.05$ at both ages), difficult child temperament at ages 3 and 4 ($p<.05$ for both), and poorer adolescent and young adult adjustment ($r=-.25$, $n=98$, $p<.01$ at adolescence, $r=-.21$, $n=103$, $p<.05$ at young adulthood). However, only concurrent relations between other childcare practices and child outcome reached significance for such factors as inconsistent discipline, economic stress, and parental concern.

Results for boys and girls are presented in Table 3. Sex differences were evident in several areas. For instance, although there was a relation between economic stress and difficult child temperament at ages 3 and 5 for both sexes, boys and girls demonstrated different long-term outcomes. For girls, economic problems were related to more adjustment difficulties in young adulthood. For boys, this early stressor was associated with a positive young adult adjustment. Parental conflict was related with a poorer adolescent and adult adjustment for both sexes, but this effect was more marked for boys. Maternal rejection was predictive of boys' and girls' adjustment behavior problems at ages 3 and 5, but also was correlated with boys', not girls, adaptation difficulties in adolescence and young adulthood. Maternal rejection also was related inversely to girls IQ scores at ages 3, 6, and 9. Finally, for girls, inconsistent discipline was a strong predictor of later adjustment problems. No such relation was evident for boys.

Insert Table 3 about here

Given that parent childcare practice and attitude variables were intercorrelated, a series of hierarchical multiple regressions were conducted. Since there were sex differences when bivariate relations were examined, separate analyses were performed for boys and girls respectively. Predictor variables were varied according to the results obtained from bivariate correlations. Outcome variables that accounted for the most variance in the univariate correlations were placed last in the regression equations, preceded by variables that also reached significance but accounted for less variance for the specific child outcome variable.

Results for boys and girls are presented in Table 4. There were no significant childcare predictor variables for boys' early outcome. For adolescent and young adult adaptation, parental concern and parental conflict both were significantly related to males' later adjustment. Though it was entered second in the regression each time, conflict added more independent variance in the prediction of later adjustment difficulty than other childcare factors for all three long-term adjustment variables. In terms of positive outcome, parental concern was associated with later adaptation by boys. For girls, few childcare practices were related to short-term or long-term adjustment. However, parental inconsistent discipline practices and economic stress were related to females' concurrent behavior problems at home.

Insert Table 4 about here

Part IV: Interaction of Temperament and Parental Conflict. The effects of the interaction of child temperament (ages 1-5) and parental conflict (assessed when child was age 3) on child outcome above and beyond the effects of each variable alone were assessed using a hierarchical multiple regression procedure. For each child outcome measure, two regression procedures were conducted. Marital status was entered first in both instances, followed by either child temperament or parental conflict, and the temperament/conflict interaction term. In general, there was little evidence to support the interaction hypothesis. The temperament/conflict interaction term did not significantly add to the prediction of child outcome at any age. There was one apparent exception to this trend, in the prediction of adolescent adaptation at age 1. However, upon closer scrutiny, the increase in accounted variance contributed by the interaction term can be attributed to parental conflict by itself. When conflict is entered before the interaction term, not temperament, the effect of the interaction term is dissipated.

Discussion

Many of the results of the present study contradict those found in other research. With regards to the prospective analyses, the findings of Block et al. were not corroborated. Girls, rather than boys, showed more problematic behavior prior to the parental separation, although even these differences were not consistent. The effects of time on children's adjustment to divorce also were not in accord with prior research findings. Children's adjustment generally was not related to the time since the parental separation. Finally, the interaction between temperament and parental conflict also was not powerful in predicting children's short- and long-term adjustment.

Other findings were consistent with prior research, however. Parental conflict was consistently related to children's short- and long-term adjustment, while post-divorce relations indicated more adjustment

problems for boys than girls, especially in adolescence and young adulthood.

Results of the prospective analyses suggest that children of both sexes may be more vulnerable to conflict and/or the impending divorce in the 3-4 age range. Infants and toddlers may be too young to have much awareness of the situation, while children have more coping strategies and support during the school-age years. Girls appear to be slower to recover from these difficulties, but show fewer problems in young adulthood. Boys make a more immediate recovery prior to the divorce, but show greater adaptation problems in adolescence and young adulthood.

In comparing the post-divorce findings with results of the prospective analyses, there is a discontinuity between the adjustment of girls preceding and following the parental separation. Girls from eventually-separating families were consistently rated as more temperamentally difficult than girls from intact families. However, when girls reached young adulthood (following the divorce in all cases), parents rated them as significantly better adjusted than girls from intact families. Several alternative explanations are possible. The discontinuity could be a function of a parental bias effect, so that parents' reporting of girls' improvement over time was more related to parents' improved adjustment. Hetherington has found evidence to support this explanation (Hetherington, personal communication, 1987). In a 5-year follow-up of divorced families, she found that mother's reports of children's temperament ratings were more predictive of later parent adjustment than children's adjustment.

Divorced girls' later improvement also could be accounted for by the presumed decrease in daily overt parental conflict. The impact of the conflict may be lessened for girls with the father gone from the house. The father's departure may lessen conflict, but exacerbate other problems for boys, however. Boys showed an increase in problems following the divorce, perhaps reflecting the experience of living in the custody of their mothers as the vast majority did in this study. Support for this finding is available from the work of Santrock et. al. (1979, 1982), who found that boys who lived with mothers following the divorce were at an increased

risk for later behavior difficulties in comparison to boys in father-custody homes.

The finding that boys appear less well-adjusted than girls as a result of a divorce is in accord with previous literature. The only inconsistency is apparent when pre-divorce relations are examined. The findings are not in agreement with the results of the only other research project which has conducted such analyses (Block et al., 1986). But since no other investigators have a prospective data base from which to compare the present findings on girls' problematic behavior prior to parental separation, firm conclusions about girls' pre-separation behavior patterns cannot be made. Rather than speculate, it is imperative to examine other data bases which offer similar opportunities so that a more precise course of children adjustment to divorce can be traced, beginning prior to the parents' separation.

Thus far, research indicates that boys' behavior disorders are more strongly correlated with family discord than girls (Rutter, 1971; Wolkind & Rutter, 1973); however, recent studies conducted with children of battered women, where parents remain intact despite frequent parental conflict, indicate that girls may be as vulnerable as boys to behavior problems under certain conditions (Christopoulos, Cohen, Shaw, Joyce, Sullivan-Hanson, Kraft, & Emery, 1987; Rosenberg, 1984; Shaw & Emery, 1988). Also, it is important to remember that the majority of previous investigators that cited the elevated problems for boys evaluated their subjects following the divorce. Girls may be affected negatively to conflict as well, but exhibit their signs of difficulty prior to the parental separation.

Results from the childcare practices analyses also mark the importance of examining sex differences. When children are grouped together, only effects that are common for both sexes are revealed. In the case of the childcare practices findings, the salience of parental conflict in affecting later child outcome was not masked because it was evident for both sexes; however, other variables idiosyncratic to one sex were. For instance, girls were more vulnerable to other factors, including inconsistent discipline and economic stress, while for boys, maternal rejection was a more salient factor. Even in the case of parental conflict, although it

was found to affect later adaptation for both boys and girls, effects were significantly stronger for boys.

Unfortunately, because there were no follow-ups to the parenting measure, it is difficult to ascertain whether these parenting characteristics were present at similar levels throughout the child's development. Thus, the long-term efficacy of parental conflict in affecting children's adjustment may be due to its continued presence, its potency in affecting later behavior, or both factors. The same is true for the lack of long-term efficacy of the other parenting factors in affecting children's adjustment. Had their levels been continually assessed throughout the child's development, one wonders whether relations would have been more consistent as well. Despite the lack of follow-up and the uncertainty in interpreting the exact meaning of the results, the utility of examining family process dimensions has once again been demonstrated, particularly with regard to parental conflict. From this perspective, this study should be viewed as a confirmation of previous investigations of children's adaptation to divorce (Block, et al., 1986; Ferguson et al., 1986; Hetherington et al., 1982; Wallerstein & Kelly, 1983). Attention to family process variables and sex differences in children's response to these factors should not be left unturned in future research.

There are several limitations which should be pointed out in interpreting the results of the study. The foremost has to do with the study's original purpose and the goals of the present undertaking. That is, the project was not originally designed as a study of children's adjustment to divorce. Although this limitation does have its advantage of working against expectancy bias, it also presents methodological constraints. Questions that would have been asked throughout the course of the study were only asked once or not at all (e.g., parental conflict, consistency and frequency of visitation).

Other limitations are inherent to the study itself. Among these are the psychometric properties of some measures, the unusual sample composition, subjects' propensity to over-report psychiatric disturbance (Robins, 1979), and the lack of control for family size, birth order, or later family structural changes.

Despite the methodological considerations, the findings of the study are important because of the

unusual perspective they offer. Given the practical limitations of gathering such prospective data, much less longitudinal data with such a lengthy follow-up, the data are too important to ignore. Results suggest that boys and girls follow a different developmental pathway than boys in responding to parental conflict and divorce, with girls being more severely affected prior to the parental separation and boys showing more adjustment problems later on long past the end of the marriage. Given the scarcity of other comparable studies, it is important that other data bases which offer similar opportunities be examined.

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Table 1

Correlations between Marital Status and Child Outcome: Post-Divorce Relations- Boys and Girls

BOYS	Child Outcome Variables (N)							
	Temp. Age 1	Temp. Age 2	Temp. Age 3	Temp. Age 4	Temp. Age 5	Home Beh. Age 3	Home Beh. Age 5	School Beh. Age 5
	(53)	(54)	(51)	(51)	(39)	(62)	(57)	(53)
Marital Status	-.04	.07	.03	-.02	-.05	-.08	.03	-.23
N Intact	49	50	46	46	33	57	51	47
N Divorced	4	4	5	5	6	5	6	6

	IQ Age 3	IQ Age 6	IQ Age 9	Adoles. Adapt.	Adult Adapt. Subj.	Adult Adapt. Parent
	(60)	(57)	(31)	(52)	(64)	(26)
Marital Status	.06	-.04	.14	-.22x	-.30**	-.48**
N Intact	57	52	26	35	44	18
N Divorced	3	5	5	17	20	8

GIRLS	Child Outcome Variables (N)							
	Temp. Age 1	Temp. Age 2	Temp. Age 3	Temp. Age 4	Temp. Age 5	Home Beh. Age 3	Home Beh. Age 5	School Behav. Age 5
	(53)	(58)	(52)	(47)	(37)	(66)	(61)	(58)
Marital Status	-	-	-	-	-	-	-.19x	.12
N Intact	53	58	52	47	37	66	59	56
N Divorced	0	0	0	0	0	0	2	2

	IQ Age 3	IQ Age 6	IQ Age 9	Adoles. Adapt.	Adult Adapt. Subject	Adult Adapt. Parent
	(64)	(61)	(19)	(55)	(63)	(23)
Marital Status	-	.18	.18	.13	.10	.35*
N Intact	64	59	18	52	56	20
N Divorced	0	2	1	4	7	3

x p<.10, * p<.05, ** p<.01, *** p<.001

Table 2

Prospective Relations Between Marital Status and Child Outcome: Boys and Girls

BOYS	Child Outcome Variables (N)							
	Temp. Age 1	Temp. Age 2	Temp. Age 3	Temp. Age 4	Temp. Age 5	Home Beh. Age 3	Home Beh. Age 5	School Beh. Age 5
	(62)	(62)	(61)	(60)	(60)	(61)	(60)	(60)
Marital Status	.07	-.10	-.23x	.18	-.07	.03	-.07	.06
N Intact	45	45	45	45	45	45	45	45
N Divorced	17	17	16	15	15	16	15	15

	IQ Age 3	IQ Age 6	IQ Age 9
	(61)	(60)	(31)
Marital Status	-.12	.07	.10
N Intact	45	45	26
N Divorced	16	15	5

GIRLS	Child Outcome Variables (N)							
	Temp. Age 1	Temp. Age 2	Temp. Age 3	Temp. Age 4	Temp. Age 5	Home Beh. Age 3	Home Beh. Age 5	School Behav. Age 5
	(67)	(67)	(67)	(65)	(65)	(65)	(65)	(65)
Marital Status	.08	-.18x	-.04	-.26*	-.24*	.11	.03	.06
N Intact	58	58	58	58	58	58	58	58
N Divorced	9	9	9	7	7	7	7	7

	IQ Age 3	IQ Age 6	IQ Age 9
	(67)	(65)	(19)
Marital Status	.03	-.13	.27
N Intact	58	58	16
N Divorced	9	7	3

x $p<.10$, * $p<.05$, ** $p<.01$, *** $p<.001$

Table 3

Childcare Practices and Attitudes and
Child Outcome Variables: Boys and Girls

BOYS	Child Outcome Variables (N)					
Parental Childcare Practices	Temp. Age 3 (43)	Temp. Age 4 (43)	Temp. Age 5 (35)	Home Behav. Age 3 (53)	Home Behav. Age 5 (51)	School Behav. Age 5 (50)
Conflict	.15	.24.*	-.06	.31*	.03	-.05
Incon. Discipl.	.15	-.10	-.01	.14	-.02	.11
Maternal Rejec.	.23x	.22x	-.05	.28*	.16	-.07
Econ. Stress	.36**	.06	.22x	-.11	-.08	-.12
Concern	.31*	-.08	-.11	.00	-.23x	-.04
Limit-setting	-.06	.15	-.07	.05	-.04	-.07
Parental Childcare Practices	IQ Age 3 (51)	IQ Age 6 (52)	IQ Age 9 (26)	Adol. Adap. (48)	Adult Adapt. Subj. (52)	Adult Adapt. Parent (21)
Conflict	-.14	-.02	.04	.34**	-.51***	-.60**
Incon. Discipl.	-.01	.04	.19	.14	.13	.15
Maternal Rejec.	.16	.28*	.09	-.38**	-.35**	-.32x
Econ. Stress	.14	.02	-.12	.06	.19x	.31x
Concern	-.31	-.11	-.29x	.09	.07	.41*
Limit-setting	-.15	.03	-.05	-.08	.04	-.01

x p<.10, * p<.05, ** p<.01, *** p<.001

Table 3 continued

Childcare Practices and Attitudes and Child Outcome Variables

GIRLS	Child Outcome Variables (N)					
Parental Childcare Practices	Temp. Age 3 (43)	Temp. Age 4 (43)	Temp. Age 5 (36)	Home Behav. Age 3 (53)	Home Behav. Age 5 (52)	School Behav. Age 5 (48)
Conflict Incon.	-.13	.13	-.09	.26*	.14	.22x
Discipl.	.14	.14	.02	.39**	.47**	-.02
Maternal Rejec.	.28*	.19	.01	.23*	.29*	-.00
Econ. Stress	.26*	.07	.38*	.37**	.29*	-.12
Concern	.07	-.03	-.21	.03	.12	-.17
Limit-setting	.12	-.16	.08	-.13	-.20x	.08
Parental Childcare Practices	IQ Age 3 (52)	IQ Age 6 (51)	IQ Age 9 (22)	Adol. Adap. (50)	Adult Adapt. Subj. (51)	Adult Adapt. Parent (19)
Conflict Incon.	-.01	-.16	.25-	.24x	-.29*	-.35x
Discipl.	-.00	.01	-.19	-.34**	-.30*	-.13
Maternal Rejec.	-.38**	-.20x	-.51*	-.18	-.16	.07
Econ. Stress	.06	.09	.17	-.15	-.39**	-.28
Concern	.02	-.06	-.43*	.09	.07	-.13
Limit-setting	-.01	-.11	.17	-.02	.13	.21

x p<.10, * p<.05, ** p<.01, *** p<.001

Table 4

Hierarchical Multiple Regression Analyses: Childcare Practices and Attitudes as Predictors of Child Outcome- Boys and Girls

BOYS

Child Outcome Variable	Predictor Variable	Increment in R2	Overall R2
Adolescent Adaptation	Concern	.04x	.04x
	Conflict	.13**	.17**
Young Adult Adaptation-Subject	Concern	.03x	.03x
	Conflict	.12**	.15**
Young Adult Adaptation-Parent	Concern	.04x	.04x
	Conflict	.10**	.14**

GIRLS

Child Outcome Variable	Predictor Variable	Increment in R2	Overall R2
Home Behavior Age 3	Inconsistency	.09x	.09x
	Economic Stress	.09*	.18*

x $p<.10$, * $p<.05$